Dockets 222

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

11 MAR 1992

EX PARTE OR LATE FILED

92-9

IN REPLY REFER TO:
CN9200665

RECEIVED
MAR 12 1992
Federal Communications Commission
Office of the Secretary

Honorable Phil Gramm
United States Senate
370 Russell Senate Office Building
Washington, DC 20510-4302

Dear Senator Gramm:

Thank you for your letter regarding Commission proposals to allocate spectrum for personal communication services. Your constituent, Mr. Mark Rose, General Manager of the Lower Colorado River Authority, expressed concern to you regarding proposals to reallocate frequencies at 2 GHz that would impact the existing users of these frequencies, including electric utilities and other industries.

On January 16, 1992, the Commission adopted a Notice of Proposed Rule Making (Notice) in ET Docket No. 92-9 that proposes allocating 220 MHz of spectrum at 2 GHz for use by new services and technologies. The Office of Engineering and Technology has developed a fact sheet that outlines this proposal. I have enclosed a copy for your information. In addition, because there has been some confusion about how this proposal would impact local and state government agencies, I have enclosed a fact sheet that describes how those agencies would be affected by certain spectrum policies currently under consideration.

Briefly, under the Commission's proposal, state and local government licensees, including public safety agencies, would indefinitely continue their current operations on a primary basis. Other existing licensees would be permitted to continue their current operations on a primary basis for a period of time to be established - such as 10 or 15 years. Subsequently, they would be permitted to continue operating only on a secondary basis. Expansion and new microwave systems would be permitted on a primary basis only at higher frequencies. In conjunction with the Notice, the Commission released a staff study of existing use of this spectrum and identified other suitable frequencies available for this purpose. To further facilitate accommodation of the competing demands for this spectrum, the Commission also proposed to permit negotiation of financial arrangements between existing licensees and parties proposing new services. Such an approach would facilitate access to this spectrum for services employing emerging technologies.

0+3

No. of Copies rec'd _____
List A B C D E

These provisions are intended to prevent disruption to the communications of the existing licensees, yet still provide the spectrum needed by U.S. companies to develop new and innovative telecommunications products and services and bolster U.S. competitiveness in world telecommunications markets. An example of one such new proposed service is the personal communications service (PCS), which the Commission is addressing concurrently in GEN Docket No. 90-314.

The needs of the existing 2 GHz users are of importance to the Commission, and are being taken carefully into consideration. Please be assured that Mr. Rose's concerns will be taken into account before a final determination is made in this matter. For that purpose, I am making this correspondence part of the record in the two dockets discussed above, ET Docket No. 92-9 and GEN Docket No. 90-314.

Sincerely,

Thomas P. Stanley

Thomas P. Stanley
Chief Engineer

Enclosures

Phil Gramm
Texas

United States Senate

DE 7
GD 31C
665

MEMORANDUM

Date: 2/27/97

My constituent has sent me the enclosed communication, and I would appreciate a response which addresses his/her concerns.

Please send your response, together with the constituent's correspondence, to me at the following address:

Office of Senator Phil Gramm
370 Russell Senate Office Building
Washington, D.C. 20510-4302

Attention: David Parker ✓

THE POWER TO MAKE A DIFFERENCE.

FCC
2/27/92

January 21, 1992

The Honorable Senator Phil Gramm
370 Russell Senate Office Building
Washington, D. C. 20510

Dear Senator:

As you know, the FCC has recently released a Policy Statement and Order concerning the establishment of new personal communications services (PCS). The microwave spectrum that the FCC is considering for these new services range from 1850 MHz to 2200 MHz. This spectrum is used by LCRA to provide critical communications which support the operation of our water and electric systems. In addition, this spectrum is also used by other electric utilities, oil and gas pipelines companies, railroads, local government agencies, police, and Federal power agencies, all of which provide vital services to the public.

Attached is a copy of our letter to the FCC which expresses our opposition to this Policy Statement and Order.

While we understand and support the need for these technologies to succeed, it is unthinkable that the rate payers of Central Texas should have to bear these costs. Our estimates show that the cost of replacing LCRA's current system with an equally reliable system will be approximately $18,000,000.00.

While cost is certainly important, reliability is essential. Our recent experiences with flooding in Central Texas reinforced the point that these communication systems must be reliable.

At the present time, the FCC has made no plans for where they will move us, when they will move us, or who will bear the cost of these moves. It is essential that before the FCC moves ahead with their plans to move us from this spectrum, a transition plan needs to be in place which addresses where we will move and how we will be compensated for this move.

We would appreciate any help you can give us on this important issue and hope that you will let Chairman Sikes and other FCC commissioners know of your concerns.

Yours truly,

Mark Rose
General Manager

LOWER COLORADO RIVER AUTHORITY P.O. BOX 220 AUSTIN, TX 78767-0220 512 473 3200 512 473 3298 FAX

LCRA
THE POWER TO MAKE A DIFFERENCE.

January 6, 1992

Ms. Donna R. Searcy, Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Gen Docket 90-314 PCS Inquiry

Dear Ms. Searcy:

The Lower Colorado River Authority (LCRA) hereby submits these comments regarding the Federal Communications Commission's PCS Inquiry, Gen Docket 90-314, and the December 5, 1991, En Banc hearing on PCS.

The LCRA was established in 1934 as a conservation and reclamation district to establish flood control on the lower Colorado River and provide electric energy throughout central Texas. Although a governmental agency of the State of Texas, LCRA receives no tax revenues and relies upon the sale of water and electricity to fund its various public service programs.

Located in Central Texas, LCRA manages the water resources of the lower Colorado River basin including flood control, irrigation, conservation, and water quality. With a total electric generating capacity of 2250 megawatts, LCRA distributes electric energy to 44 wholesale customers including 11 electric cooperatives and 33 municipalities. LCRA's electric service area covers 31,000 square miles and reaches over 800,000 end users. In addition, LCRA operates a control center that coordinates emergency assistance between the electric utilities of the Electric Reliability Council of Texas (ERCOT), one of the nine regional councils of the North American Electric Reliability Council (NERC).

The LCRA owns and operates 85 microwave paths that are used primarily for monitoring and control of its generation and transmission facilities. This microwave system is also essential to watershed monitoring and flood control, corporate data communications, two-way radio systems, paging, telephone, and load management. Our microwave system is interconnected with other ERCOT utility microwave systems. This allows for the exchange of critical data needed to support the operation of the ERCOT interconnected electric system grid. Of our 85 microwave paths, 57 fall within the 1850-2200 MHz band which the FCC has targeted for creating a "spectrum reserve" for "emerging technologies".

LCRA is not opposed to emerging technologies, but is opposed to vacating the targeted 1850-2200 MHz band for the following reasons:

LOWER COLORADO RIVER AUTHORITY P.O. BOX 220 AUSTIN, TX 78767-0220 512 473 3200 512 473 3298 FAX

1) LCRA's operation would be significantly impacted in the urban areas where the more critical portions of our system exist. Although the LCRA service area is largely rural, a large number of our microwave paths are in or very near major metropolitan areas and major interstate traffic corridors that would be initial markets for emerging technologies.

2) The 2 GHz spectrum is ideally suited to LCRA's applications because of the geographic and atmospheric conditions of our service area. We have a number of long paths and use 2 GHz because of its path reliability. A significant portion of the service area is in a coastal microwave fading zone, which is one of the conditions most adverse to path reliability. On a few of our paths, 2 GHz frequencies were not available and we were forced to employ 6 GHz. Those 6 GHz paths have failed frequently and we have been forced to reroute traffic on many occasions. We are currently considering our options to resolve the reliability problems on these few 6 GHz paths.

3) LCRA's operational responsibilities require dedicated, reliable communications to insure public safety and reliable service. Any disruption or interference of LCRA microwave communications could cause serious adverse consequences. For example: during the recent Christmas 1991 flood in central Texas, LCRA relied upon its remote water monitoring system to gather data from the watershed and river system for analysis and forecasting. This information, transmitted from many remote gauge locations, is collected at strategic microwave sites that forward the data to the LCRA control center for processing. This data is applied to a computerized flood modeling system that predicts water flow and level along the Colorado river. In flood conditions, this information allows LCRA to balance water releases from dams along the river to minimize flood damage throughout the region. Even with this tool to aid in controlling the river, the damage was severe. Without the LCRA remote gauges and microwave system to collect this data, property damage and loss of life would likely have been catastrophic.

4) Due to the critical nature of our requirements for communications, LCRA does not consider spectrum sharing to be a viable option. The LCRA is aware of the claims made by some proponents of PCS that PCS can share the 1850-2200 MHz spectrum by employing spread spectrum or other modulation techniques. Tests conducted in the Houston area using these techniques have not demonstrated that PCS and fixed microwave can coexist without interference. LCRA urges the FCC to examine carefully any claims of techniques that would allow coexistence on a noninterference basis.

5) The FCC has not developed a transition plan which would give current users ample time and compensation to effectively move to other spectrum or mediums. To ensure the long term integrity of communications currently supported by fixed microwave in the 1850-2200 MHz band, the FCC must develop a plan for transition to other spectrum or technologies that allows existing users to implement system wide solutions. If PCS service providers are allowed to selectively occupy spectrum on a random basis, those that are displaced will be forced into "bandaid" system solutions that will

result in excess expenditures and unreliable communications.

6) The cost to LCRA's ratepayers to relocate to other areas of the spectrum or other mediums would be significant and compensation should be provided from the new users who will benefit. The LCRA estimates the financial impact of vacating its existing 2 GHz microwave at:

$12,600,000 to replace all existing 2 GHZ microwave with other microwave below 3 GHz.

$17,800,000 to replace all existing 2 GHz microwave with 6 GHZ microwave and add necessary repeaters to longer paths.

$18,000,000 to replace all existing 2 GHz microwave with a fiber optic backbone loop and radial microwave spurs on frequencies other than 2 GHz.

The LCRA contends that existing fixed microwave users should not be forced to relocate from the 1850-2200 MHz band until:

(1) adequate replacement spectrum in close proximity to the 1850-2200 MHz band is made available;
(2) adequate time is allowed to construct replacement facilities;
(3) all associated costs for any relocation is paid for by the PCS licensee;
(4) the FCC develop a systematic plan for transition.

In summary, the LCRA microwave communications system is critical to maintaining reliable electric service, flood control, and public safety within the Lower Colorado River basin. The LCRA cannot ask its rate payers to bear the cost of replacing a fully functioning communications system for which they have already paid. If it is the FCC's decision to take the 2 GHz microwave spectrum for PCS and emerging technologies, it is the FCC's responsibility to ensure adequate replacement communications facilities are provided at the expense of those receiving the 2 GHz spectrum.

If you require any additional information, you may contact me or Larry Krenek at 512-473-3200.

Yours truly,

Mark Rose
General Manager

cc Senator Lloyd Bentsen
Senator Phil Gramm
Congressman Jake Pickle
Congressman Ralph Hall
Congressman John Bryant
Congressman Greg Laughlin